

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT Assistant Secretary for Housing-Federal Housing Commissioner	Series and Series Number: (Supersedes issue dated November 10, 1994)
TO: DIRECTORS, HOUSING DIVISION DIRECTORS, MULTIFAMILY DIVISION DIRECTORS, SINGLE FAMILY DIVISION	MATERIALS RELEASE NO. 737f
	ISSUE DATE: April 6, 1998
	REVIEW DATE: April 6, 2001

SUBJECT: 1. Product Plastic (PVC) Coated Steel Air Duct

**2. Name and Address
of Manufacturer**

Gary Steel Products Corporation
2700 E. 5th Avenue
Gary, IN 46402

Data on the nonstandard product, described herein have been reviewed by the Department of Housing and Urban Development (HUD) and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, or approval by HUD of the described product, and any statement or representation, however made, indicating such approval or endorsement by HUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

USE: An air duct for perimeter heating and cooling distribution systems in or under concrete slab floors on grade.

DESCRIPTION:

Gary steel ducts are spirally wound round ducts made from galvanized steel sheet fused with a 4 mil thickness polyvinyl chloride (PVC) on the exterior surface and 1 mil thickness on the interior surface. Ducts 3" to 16" inclusive of diameter are made of spiral lockseam type steel sheet. Ducts greater than 16" to 36" diameter are spiral lockseam and corrugated.

REQUIREMENTS:

Gary steel ducts shall comply with UL 181 "Standard for Factory-Made Air Ducts and Connectors." All galvanized steel sheet used in the duct shall comply with ASTM A 653-9635 "Standard for Steel Sheet, Zinc-Coated (Galvanized) by the Hot Dip Process." The thickness of the steel sheet shall be as follows:

<u>Diameter of Duct</u> (inches)		<u>Thickness of</u> <u>Sheet</u> (inches)	<u>Tolerances</u> (inches)	<u>Gauge</u>
	3 to 8	0.0179	±0.003	26
greater than	8 to 14	0.0239	±0.003	24
greater than	14 to 22	0.0299	±0.003	22
greater than	22 to 28	0.0359	±0.003	20
greater than	28 to 36	0.0478	±0.003	18

INSTALLATION:

All installations shall be made in accordance with the manufacturer's instructions.

1. Gary plastic coated steel air ducts shall be used only in or under concrete slab floors on grade.
2. Field connections shall be made with the use of factory-made slip coupling connections, fastened by sheet metal screws and covered with Hardcast tape and Hardcast adhesive or equivalent. All remaining exposed raw edges, screws or metal shall be coated with factory-supplied, brush-applied, touch-up coating. The 9 mil, 2" wide tape shall have three wraps with 3" on each side of the joint.
3. The heating unit used with Gary Steel air ducts shall be:
 - a. electric resistance or heat pump, or automatically fired gas or oil furnace;
 - b. equipped with a temperature limit control having a maximum setting of 200°F; and
 - c. located at or above floor level.

4. A continuous vapor retarder membrane shall be installed under the slab.
5. Ducts shall be sloped down at least 1/8" per foot toward the plenum chamber. The top of the perimeter ducts can extend into the concrete, leaving a minimum of 2 1/2" of concrete above the top, or the duct can be placed 4" below the concrete.

WARRANTY:

Gary Steel Products Corporation guarantees this ducting under normal use for five (5) years from the date of installation. Should any defect occur, Gary Steel Products Corporation will replace the defective product.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Construction Standards Division, HUD Headquarters, with a representative list of properties in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate User Fee shall be sent to:

U.S. Department of Housing and Urban Development
Technical Suitability of Products Fees
P.O. Box 954199
St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revision may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

1. conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
2. the manufacturer has changed its organizational form without notifying HUD, or
3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a cancelled document.

This Materials Release is issued solely for the captioned firm, and is not transferable to any person or successor entity.
